REPORT

OF THE

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BRONX RIVER PARKWAY COMMISSION

APPOINTED UNDER

CHAPTER 669 OF THE LAWS OF 1906

NEW YORK BOTANICAL GARDEN

Madison Grant, Chairman James G. Cannon, Dave H. Morris, Commissioners

WM. W. NILES, Secretary
J. Warren Thayer, Engineer

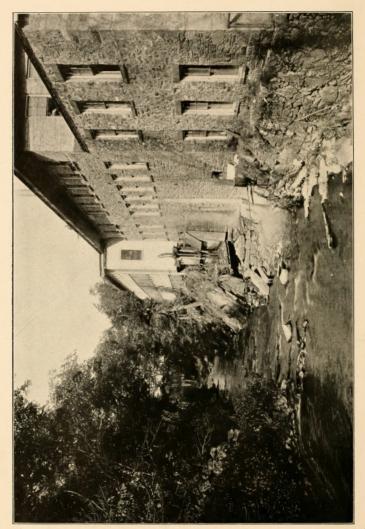
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THE BRONX RIVER IN MANY FORTIONS STILL UNSPOILED, WITH UNUSFAL PICTURESQUE AND ASTHERIC INTEREST, WILL CONTRIBUTE INESTIMABLY TO THE VALUE OF A RESERVATION FOR PARK DEVELOPMENT.







PRESENT RIVER ENVIRONMENT, SHUNNED BY ALL DESIRABLE COMMUNITY GROWTH.

To the Governor of the State of New York:

THE undersigned respectfully report that in pursuance of Chapter 669 of the laws of 1906, an Act which provides for the appointment of commissioners to inquire into the advisability of preserving the waters of the Bronx River from pollution, and of creating a reservation of the lands on either side of the river, they were appointed commissioners by the Hon. Frank Wayland Higgins. Governor of the State, and that they thereupon qualified as such commissioners and organized by the election of Madison Grant, as Chairman, and James G. Cannon, as Treasurer, and that they appointed William W. Niles, Secretary, and J. Warren Thaver, Engineer. That immediately after their organization, the Board made a careful personal inspection and examination of the Bronx River from Bronx Park to Kensico Reservoir, and repeated this personal examination from time to time thereafter. That they familiarized themselves with the present condition of the stream, the improvements along the borders thereof, the appearance and topography of the adjoining land. That they were greatly impressed with the natural beauty of the stream and its immediate surroundings where the march of alleged improvement had not impaired that beauty, and of its great importance to Bronx Park. and those great institutions, the New York Botanical Garden and the New York Zoological Park, which are located in the Bronx Park, and to the portion of Westchester County through which the stream runs. That the Board felt the necessity from the outset of immediate action if the river was to be saved, and concluded that its preservation was important not only to the City of New York but to Westchester County.

In looking for a precedent for action to save the river, the Board found that it was not necessary to go abroad where such action is quite usual, but that here at home enlightened communities had already commenced to take such steps, as for instance in the case of the Wissahickon, in Philadelphia, and of the Charles River, in Boston, and it also found on investigation that throughout the Union municipalities were awakening to the necessity of taking concerted action in order to preserve tracts of unusual natural beauty from destruction and to maintain them for public use.

Under the terms of the Act, the commission was required—if it should decide in favor of creating a reservation to preserve the Bronx River—to prepare a map or plan of said proposed reservation, showing the lands necessary to be taken, and to include in its report an estimate of the cost of taking the lands necessary to constitute such reservation, and to report its views as to how such cost should be met.

Having unanimously decided that the reservation should be created, the Board instructed its engineer to prepare a map or plan following certain boundaries as to extent which were indicated by the Commission. The area taken being limited by the consideration of the cost which the acquisition of the land to be taken would entail, but always including such amount of land as was necessary to carry out the purpose of the Act under which the Commission was appointed. This map or plan was not completed until the Commission had obtained full information as to the proposed plans of the New York Central Railroad Company, which operates the Harlem Railroad, running along the bank of the river almost its entire length, and which proposes a widening of the roadbed of its railroad and of the plans of the New York, New Haven & Hartford Railroad Company, which has recently acquired a large tract of land lying on either side of the Bronx River between Woodlawn and the northerly line of Bronx Park in the City of New York, and of the Bronx Valley Sewer Commission, which is working upon a plan for a great trunk sewer through the valley of the river from White Plains to Woodlawn, and of the President of the Borough of the Bronx, in whose office plans have been prepared for a boulevard to be known as the Bronx Boulevard, running parallel with the river and some few hundred feet eastwardly therefrom, from Bronx Park to Woodlawn in the City of New York. The map or plan prepared by the engineer shows all of these proposed improvements so far as they had developed at the time of the preparation of the map. Conferences were held by the Board with representatives of the Sewer Commission, of the New York Central Railroad Company, of the New York, New Haven & Hartford Railroad Company, and of the President of the Borough of the Bronx, and all of these representatives heartily approved the general plan of the Commission and assured it of the hearty co-operation of their respective principals when the matter should come before them officially.

In determining, as it was bound to, the cost of taking the lands

necessary to constitute the reservation, the Board decided that the fairest basis of valuation would be the present value as assessed for the purposes of taxation, and has based its estimate of cost upon such assessed value. After careful consideration of the subject and conferences with representative taxpayers in the City of New York and County of Westchester, the Board decided that the cost of the improvement should be divided between the City of New York and the County of Westchester in the ratio of two-thirds for the former, and one-third for the latter, and that this cost should be met by a bond issue in the necessary amount.

Some of the considerations which have influenced the Commission in its conclusion are as follows:

BETTERMENT AREA.

The City of New York, with its narrow peninsular form, between the Hudson River and the Long Island Sound, is exceptional in having really only one landward extension from Manhattan Island. The land connection extends through the Borough of Bronx and lower Westchester County; and is a comparatively narrow territory, only six and a half miles wide at the north line of the city, and at Tarrytown, the distance is only seven and a half miles from the Hudson River to the Connecticut line.

In general topography, this territory occupies a rising elevation, a succession of valleys and wooded ridges extending along the generally parallel, dying spurs of the Green Mountain and Berkshire Ranges.

In the longest of these valleys lies Bronx River. Its course runs almost south and parallel with the Hudson through West-chester County and the Borough of the Bronx, and terminates, so far as picturesque features are concerned, in the Zoological Park and Botanical Gardens. Between the city line and Kensico Lake, the river forms the boundary between the cities of Mount Vernon and Yonkers, and the townships of Eastchester, Greenburgh, Scarsdale, White Plains, Mt. Pleasant, and North Castle.

Thus between the so-called "Hudson River Section" on the west, and the towns designated as "Along the Sound" on the east, there is an equally well-defined middle or interior zone, the Bronx water-shed, uniform in its interest and development, having an area, north of Bronx Park, of about fifty square miles. This district is developing with great rapidity.

WIDENING CITY GROWTH.

Statistics show that the population of all our large cities is increasing with the greatest speed in the outer zones. In New York City, perhaps the most congested in the world, because of its close water surroundings, we are also witnessing a new and marked trend of city overflow to the suburbs; and with the completion of new transportation facilities, as against the former ferry-boat and bridge, a large portion of this will naturally be diverted to the immediately adjacent Westchester section.

The Harlem Division of the New York Central & Hudson River Railroad is being converted for four-track electric rapid-transit service, while other transportation, water, electric light, gas, and various service corporations and State realty interests are already in extended operation, and projecting larger investments. Progressive municipal and community projects—highways, schools, churches, etc., are seeking to keep pace with, and stimulate, progress.

Without attempting to give figures for the Borough of the Bronx, the Commission on Bronx Valley sewer reports existing property valuations of \$30,000,000, and anticipates ultimate population of \$50,000 on the Bronx water-shed beyond the city limits.

POLLUTION AND RIVER CONDITIONS.

The Bronx is the most important stream in the metropolitan district, with an increasing utilitarian and æsthetic value, important in view of the constant increase of the city's population. A present movement is on foot to obtain government aid to make the lower tidal outlet of the river navigable to West Farms; but the portion under consideration, flowing through the Zoological Park, Botanical Gardens, and above, is a comparatively shallow stream, except in freshet. The upper course lies through a most picturesque valley and amid delightful surroundings, but in the vicinity of Bronxville, Mount Vernon, and below, to Bronx Park, its channel winds through old erosion bottoms, widening from 300 to 1,000 feet between the railroad and the line of the New York aqueduct.

With insufficient current to earry off the sewage and refuse discharged into it, the stream is rapidly becoming an open sewer; the low meadow and marsh lands, always wet and, at seasons, overflowed, are not suited for habitation. Added to this, is the usual condition along a railroad line, which as mentioned, runs close to the river. In the city portion, and in some of the towns above, there is a low class of development and increasingly unsanitary conditions. These already constitute an intolerable nuisance and serious menace to public health, apparently being neglected until some disastrous epidemic shall bring it forcibly to public attention.

IMPORTANCE OF RELIEF ACTION.

The present polluted stream, flowing through the City Botanical Gardens and Zoological Park, and heretofore one of their most attractive features, greatly injures and endangers the use of these great recreation centers for multitudes of city people. The magnitude of these institutions can be estimated from the fact that 2,200,000 people visited them in 1906, and that they had cost the City of New York \$2,500,000 for their improvement and an annual outlay of \$200,000 for maintenance. It is impossible to estimate the loss and detriment to general progress and to the value of all properties adjacent to the river zone, of a continuance of such conditions. Adequate remedy is obtainable through action by the State.

RECLAIMING RIVER.

Where either drainage or diversion of streams is not expedient, practically only two courses are open to get rid of objectionable watercourses in a city's precincts. The first, particularly familiar to old residents of Manhattan, is the enclosing of and building over the stream, which, when gradients permit and cost is not too great, affords satisfactory and full hygienic remedy. It is manifestly inexpedient and undesirable to overcome the present troublesome existence of so large a stream as the Bronx River by any such means. In this case the only final remedy lies in reclaiming the entire river, and the acquiring of the lands along its course to prevent all discharge of sewage and other pollution and the continuance of noxious river conditions.

Also notably demonstrated in similar instances in our large cities, the river reservation thus acquired and the restored stream is worth to the community far more than the entire cost of the project.

LANDS TO BE TAKEN.

Upon the map accompanying this report there is shown and designated, in section colored green, the lands and territory along the river which your Commission recommends as a river reservation. The determination of this area has been arrived at only after the most careful consideration and personal investigation by all of the Members of the Commission and its Engineer, taking counsel with City and Department Officials and with representatives of the various communities and property interests affected.

Briefly, the reservation comprises a strip of land, varying in width from 300 to 1,000 feet, approximately 15 miles in length, and including approximately 125 acres in the city and about 900 acres in Westchester, including the river itself. This would be equivalent to a continuous strip 540 feet in width.

For the most part it is physically and logically defined. The Harlem Railroad, following the level grade of the valley, occupies the west slope, 10 to 20 feet above the stream, and with several crossings forms practically a continuous boundary.

The proposed new Bronx Boulevard forms an equally natural boundary along the easterly slope from Bronx Park to Woodlawn; above Woodlawn to Scarsdale, the so-called "New York Pipe Line," or aqueduct right-of-way, again forms almost a continuous boundary on the west. Thence to North White Plains, with the railroad still on one side, the opposite boundary is taken along a natural line at the top of the slope, for the most part through undivided lands. At the lower end of Kensico Lake the reservation will join the new area and reservation being established by the New York Board of Water Supply for the projected storage reservoir, occupying some 4,000 acres. At the same point it also connects directly with the State Road extending from White Plains northerly through the center of the county.

In considering in detail the limits of the reservation, particularly in the three miles through the city limits, the Commission recommends that no property be taken except in the low river lands, and on the adjacent slope for one hundred feet only. As above stated, the lands are not occupied or adapted for wholesome development, and it is found that the area thus physically defined includes practically the entire zone of nuisance which it is desired

to eliminate through the city and outer communities, and removes all menace to public health for the future.

In the case of a few important buildings, not constituting an actual menace, these have been excepted from the reservation. Also at Bronxville and Tuckahoe Stations, and through the Yonkers Park development, the perhaps natural reservation has been narrowed, where character or development may be deemed permanent and not detrimental.

On the other hand, it is deemed expedient at some points through the Westchester portion to widen the reservation in part, to take in some additional land where it is possible at comparatively small expense, and to obtain special forest and scenic features worthy of preservation for aesthetic and parkway benefit.

As to streets and highways included, it is not desired to close or interfere with any of these which are in regular and legitimate use, or which may be necessary for future traffic, but it is proposed to acquire and extinguish, wherever expedient, all semi-established and privately opened streets, which will have no utility after the reservation has been created.

Obviously, therefore, the reservation comprises only lands of lowest value; through the city, with scattered and only nominal improvements; and in the outer portions, mainly undivided tracts, with owners generous and in many cases willing to contribute outright for park lands.

These tracts lying along the river and railroad, being heretofore practically unavailable for development, are still almost unspoiled, and with much of unusual picturesque and æsthetic interest will contribute inestimably to the value of the reservation for park development.

ADDED BENEFITS.

Even neglecting the consideration of the imperative need of a remedy for unhygienic conditions, the question of the reclaimed river and reservation is one of paramount importance to the city and future local populations in the unusual opportunity and possibilities for the development of a superb River Parkway.

It is reasonable to contemplate either the acquiring or including in such development, under some expedient arrangement, the new Bronx Boulevard and the so-called "Pipe Line" right-ofway belonging to New York City, both already partially improved with driveways, which would make material addition to the total area, approximately 100 acres. In the same connection, it will be expedient to co-operate with the Board of Water Supply of New York City for the opening of Park lands about the proposed new storage reservoir, comprising approximately 4,000 acres, which will be the most extensive inland water and point of interest near the city.

The project for a trunk sewer through the Bronx Valley in Westchester County is rapidly advancing, and preliminary surveys and working plans have been completed. The acquisition of the river reservation will permit the most expedient location of this sewer, saving the entire cost of acquiring right-of-way and easements, and admit of considerable economy in greater latitude of location and construction.

PARK DEVELOPMENT.

Professor Zueblin states that "no phase of city making speaks more eloquently of the change in American ideals than the growth of parks, playgrounds, and boulevards," and "that not acreage, nor mileage, but distribution is the standard to guide park commissioners."

While New York City has been famed the world over for its splendid park development, it is now surpassed by the City of Boston in the total acreage and comprehensive scope of its park system. The City of Chicago is acquiring extensive areas for a new Outer Park System, anticipating her growth for twenty years and a population increased to 8,000,000; and similar progress might be cited, more or less marked, in all of our large American cities.

Also noticeable in this awakening and greater consideration of civic and æsthetic development is the growing sense of unity and intimate relationship between the city and its suburbs, resulting in the increasing subordination of local differences for the sake of metropolitan advancement.

Thus far practically no provision is being made for parks or open reservations in the city's only immediate suburb, and which may, in the not distant future, be actually absorbed in its limits.

BRONX RIVER PARKWAY.

We have ample demonstration of the value and success of similar reclamation of rivers and parkway development in the near-by Fairmount and Wissahickon improvements at Philadelphia, and the Fenways of Boston, the latter treating with almost precisely similar conditions.

The proposed sanitary reservation along the Bronx River is peculiarly adapted for such development, both as to its unusual physical opportunities and from the fact that it will open up an entirely new phase in the development of the city's park system; providing a direct, level, and attractive boulevard to the city from the open countryside; and with the large Kensico Lake reservation as an objective point, we have only to picture the completion and extension of the Riverside Drive improvement along the Hudson River, and the similar development of a line along the Sound, to complete a very comprehensive outer park system for the city, with the proposed Bronx Parkway as a central feature.

The recently organized Palisade Commission is at the present time engaged in the construction of a parkway, lying along the westerly bank of the Hudson River, on a similar scale, so that this forecast is not too ambitious.

In addition to the increase of the Park System of New York, the advantage to local communities is doubly accentuated in the fact that it will not be merely a community adjunct; but following along the railroad through the entire electric zone, immediately at hand from every station, it may be pictured as a transformed life artery, extending through the heart of these communities, and a factor making for progress the value of which is difficult to estimate.

DEVELOPMENT.

As to development, the best results will undoubtedly be obtained in simplicity and naturalness of effect, preserving and utilizing to best advantage the endless combinations of natural charm and seenic possibilities in forests, rocky valleys, meadow land, and water, in which the Bronx Valley affords the utmost possibilities.

In the river reservation it will also be noted that widened por-

tions occur at expedient intervals, near Mt. Vernon, Bronxville, Yonkers Park, and White Plains, which may be even further extended by the addition of local parks through conjunction with the local communities, for development of special parks and recreation areas, with playgrounds, gymnasia, baths, boating, athletic fields, and other devices for public recreation.

In other parts the parkway reservation might at first thought be deemed insufficiently wide for desirable development, at some points barely admitting passage of the river and connecting drives; the restriction can be overcome by effective screens and planting, and with the careful merging into the wider open portions an entirely agreeable, continuous effect will be obtained.

Investigation shows that it is expedient, with modification and regulation of the river channel, to solve the flood problem and obtain sufficient drainage for the park use and wholesome condition of the river lands; and with the erection of occasional dams an infinite variety of waterways and small lakes will be obtainable at moderate expense, through which the entire valley of the Bronx from Kensico Dam to West Farms can be opened to rowboats and canoes.

For the many reasons stated the Commission is unanimously of the opinion that steps should be taken forthwith for the acquisition of sufficient land in the vicinity of the Bronx River to protect the waters of the stream itself, and in doing so preserve enough of the natural beauties of the Bronx Valley to add an attractive park scheme to the preservation of the river.

The Commission fully realizes that to carry out such a scheme as they propose will involve considerable expense, but the compelling argument in the present case is the fact that unless the land for the preservation of the Bronx River is acquired at once the opportunity will be lost forever. The river itself, unless protected, will soon become an intolerable nuisance and will have to be obliterated. The natural beauties of woodland, meadow, and rocky ledges will soon disappear before the devastating hand of man. The increase in values, owing to the rapid peopling of Westchester County, will soon render the scheme financially impracticable. The Commission feels that these reasons are imperative and that no other conclusion than the one which they have reached was possible. In this connection it is satisfactory to be able to report that, so far as their individual experience goes, the commissioners have not met with one dissenting voice, but that all who have ex-

pressed an opinion on the subject to them have expressed themselves in favor of it.

The practical question as to how the scheme shall be carried out presents some difficulties. The lands to be taken are located largely in Westchester County. A portion of them, however, lie within the County of New York. There is no existing body upon which, in the opinion of the Commission, could be satisfactorily imposed the preliminary work of carrying into effect the scheme which the Commission has in mind, and although it is not the policy of the State Government to increase the number of State commissions, it has seemed that the wisest course to pursue in this particular instance was to appoint a State commission, who should have charge of carrying out the present scheme to the extent of acquiring the land and formulating and carrying out a plan of improvement. This Commission need not necessarily be a permanent body. Eventually this whole territory will become a part of the Greater City of New York, and will then naturally fall into and form a part of its vast park system. Although the Bronx reservation will undoubtedly in the future thus become a part of the city or metropolitan park area, and under the jurisdiction of some metropolitan board, it would, in the opinion of the Commission, be extremely unwise that the acquisition and improvement of the Bronx Valley Parkway should at the present time be within the control of the Park Department of the City of New York. The lack of attention which the large park areas in the northern part of the City of New York have received from the city authorities is already the occasion of much criticism and complaint by the citizens residing in the portions of the city and of Westchester County adjacent to the parks. It is but natural that a busy city official should devote his attention to the parks in the ratio that he is importuned to do so by the citizens, the result being that the chief interest of the officials and the very large bulk of money is spent upon the parks in the populous parts of the city, and that the outlying districts get but little attention. This fact is a strong argument in favor of the appointment of a special commission, who will have at heart the proposed improvement, and will not have their attention diverted in other directions by the importunities of citizens or the pressure of official duties.

For the reasons stated the Commission recommends that an aet be passed constituting a commission of not more than three persons, who shall have charge of the acquisition of the land necessary to carry out the park scheme, and the adoption of a plan of development and improvement of the lands when acquired, and who shall have charge of the maintenance of the park reservation at least for the immediate future. That the members of this Commission should be paid a reasonable salary, sufficient to warrant their devoting the large amount of time which will be necessary to carry out the scheme in its inception. The commissioners should have power to acquire the lands by purchase, as from inquiries which the present Commission has made it is convinced that a large part of the proposed area to be taken can be acquired from the property owners by private arrangement on practically nominal terms.

The cost of acquiring the land and of laving out and maintaining the park reservation should be divided between the City of New York and the County of Westchester. The ratio presents a question of some difficulty. The majority of the land to be taken lies within the County of Westchester, and it might be contended that Westchester County should bear the larger part of the cost of the acquisition of the land and of the maintenance thereof. On the other hand, the preservation of the river is of vital importance to the citizens of New York. The Bronx River forms the chief beauty of Bronx Park, which is in itself one of the most beautiful of the city park areas and is a dominant feature of the New York Botanical Gardens and the New York Zoological Park, The loss of it to the city would be a public calamity. It is the opinion, too, of the Commission that the park reservation would be more largely used by residents of the city than of Westchester County. As yet the residents of Westchester County do not feel the need of public park advantages, and would resent being called upon to pay very heavily for them. Just what proportion each community should fairly bear it is difficult to determine, but the Commission has concluded that a fair division would be for the City of New York to pay two-thirds and the County of Westchester to pay onethird. As the cost of acquisition will be considerable and the benefit will be for all time, the Commission is of the opinion that the fairest method of raising funds necessary to acquire the lands would be by authorizing the communities affected to issue bonds sufficient to meet the cost.

The interest upon these bonds will be a comparatively small amount, and in Westchester County, at least, the increase in real estate values in the period for which the bonds will run will make the redemption of them at the expiration of that period a small matter. A sinking fund for the redemption of the bonds could be provided for if thought necessary.

The estimate of the cost of taking the lands necessary to constitute such reservation, based upon the assessed valuation of the same, is \$1,650,000.

The Commission cannot close its report without expressing its very high appreciation of the interest expressed in its work and the hearty co-operation and assistance received from the officials of the New York Central & Hudson River Railroad Company, the New York, New Haven & Hartford Railroad Company, the city authorities of the City of New York and the various cities and towns along the line of the river, from the authorities of the New York Botanical Gardens and the New York Zoological Society, the Board of Water Supply of the City of New York, and the Bronx Valley Sewer Commission, to whom the Commission is especially grateful for maps, surveys, and general information supplied, which have greatly lessened the labors of the Commission and without which the Commission would have been put to great expense.

All of which is respectfully submitted.

Madison Grant, Chairman.

James G. Cannon,

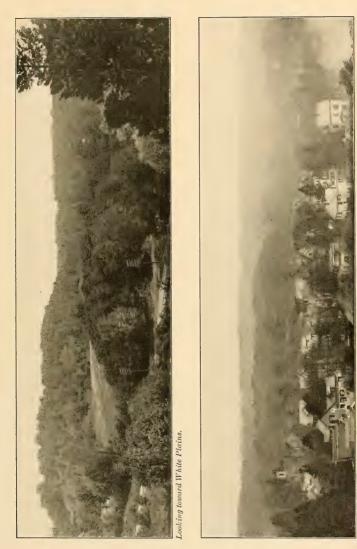
Dave H. Morris,

Commissioners.

December 21, 1906.



GENERAL TOPOGRAPHY, CITY'S EXTENDING NORTHERIX SUBURBS' UNSPOILED TERRITORY, ABOUNDING IN SCENIG AND ÆSTHETIC INTEREST.



Southerly from Bronxville.



Between Bronx Park and Williamsbridge.

THE BRONX RIVER IS THE MOST IMPORTANT STREAM IN THE METROPOLITAN DISTRICT.



River Portion at Woodlawn.



View North from Opposite Rail of Bridge Above.



Of Increasing Utilitarian and Æsthetic Value in View of the Growth of the City's Population.



River Bottoms, Woodlawn, toward Williamsbridge.

Proposed Bronx Boulevard to extend along Hillside Facing.



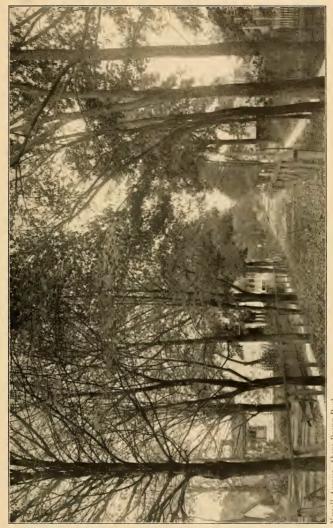


Polluted Stream and River Conditions.

MENACE TO HEALTH, RIVER ENVIRONMENT EVERYWHERE RETARDING DESIRABLE COMMUNITY DEVELOPMENT.



River Lands. Bronx Park to Mount Vernon.

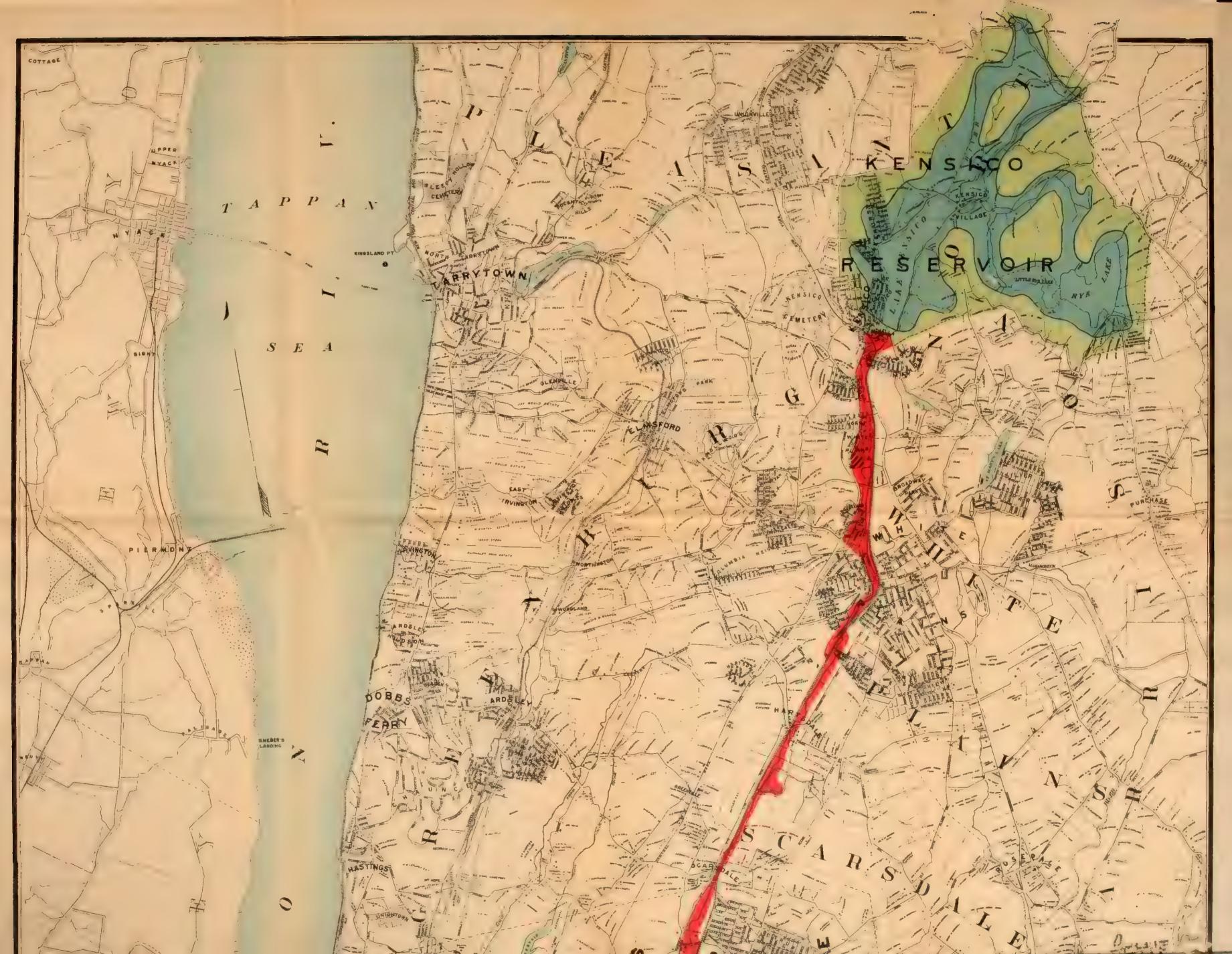


Newell Avenue, Above Bronx Park.

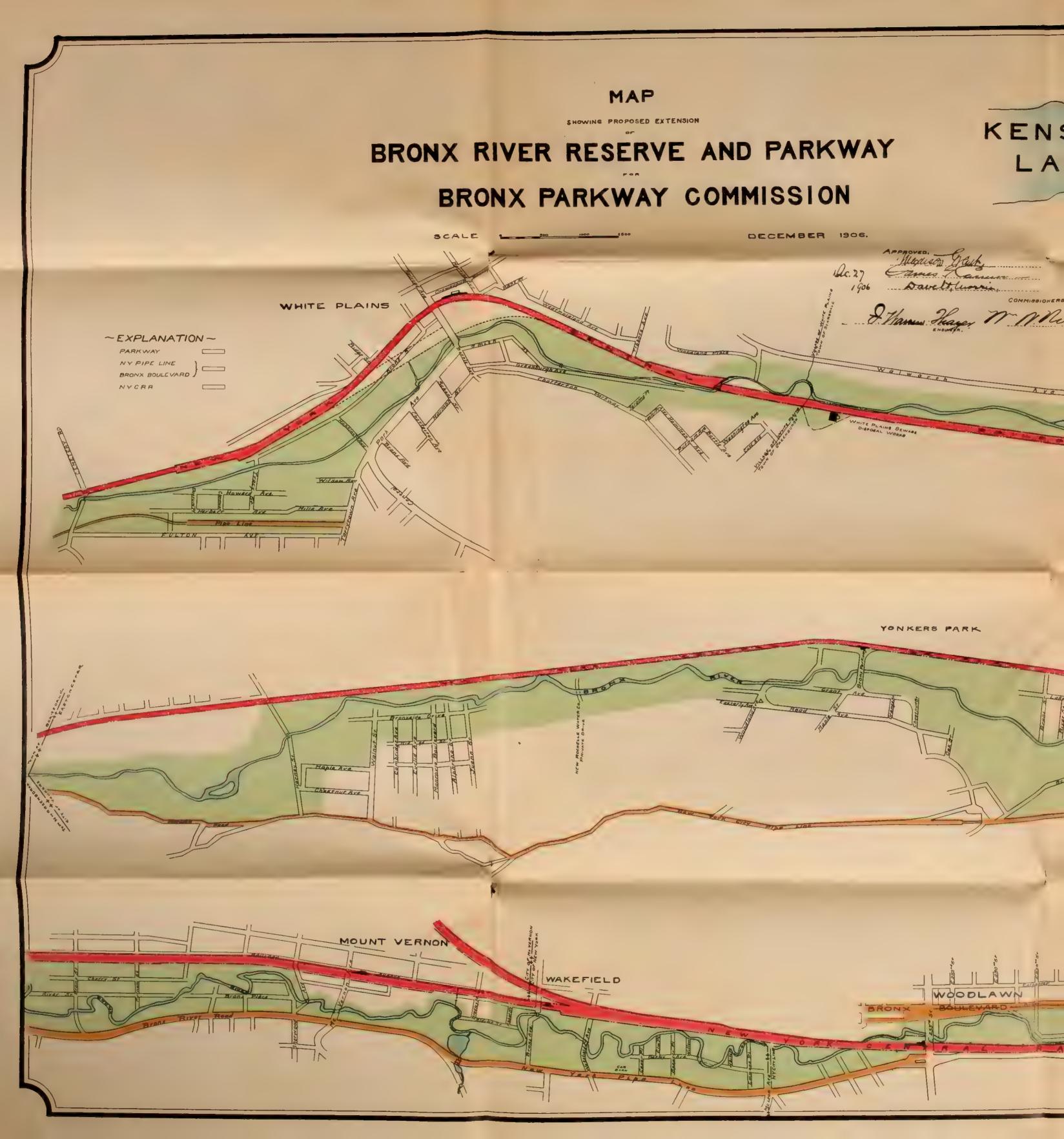
SHOWING LANDS BELOW ROADWAY, AND INFERIOR DEVELOPMENT.

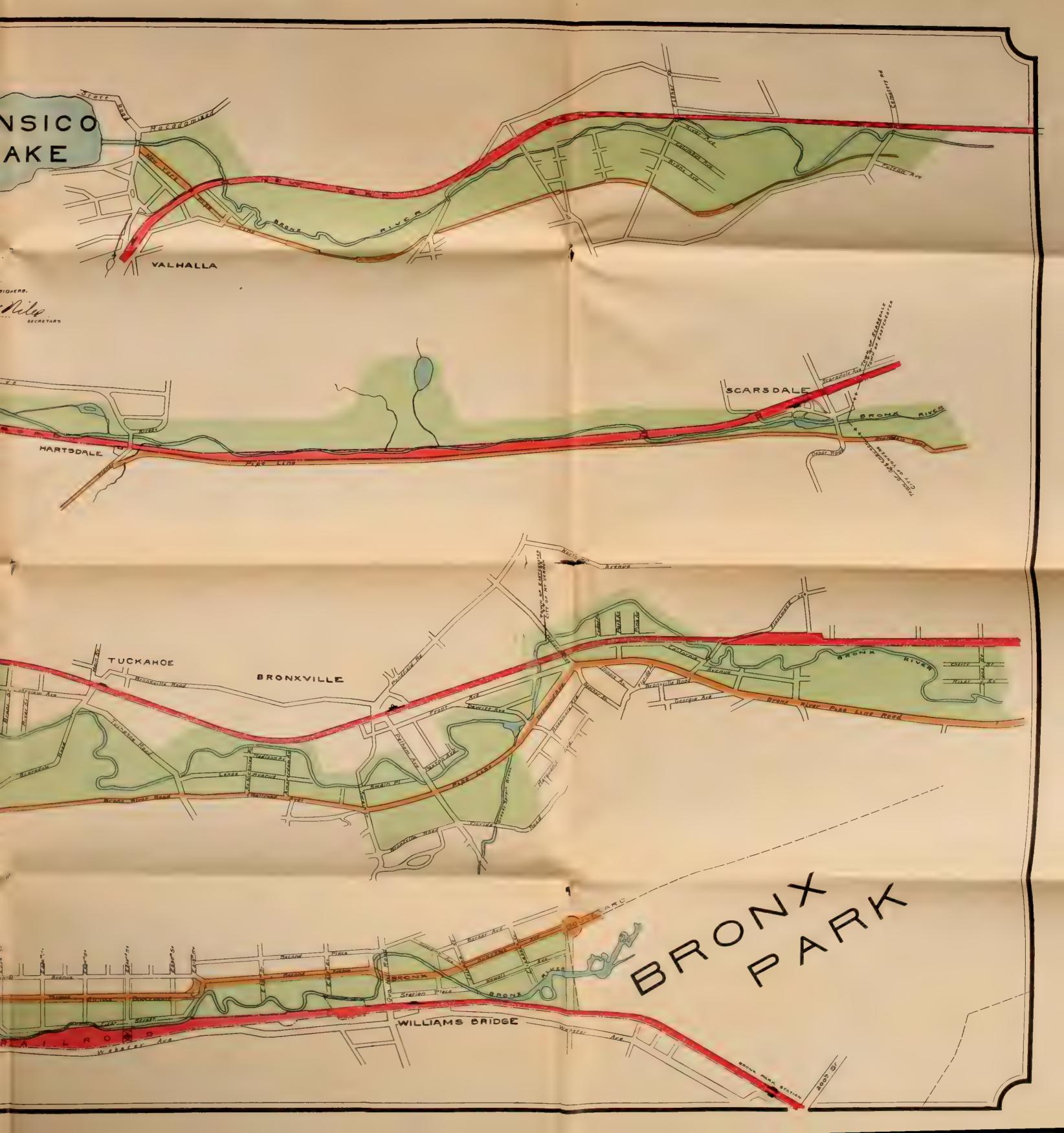
Opposite Bronxville Station.

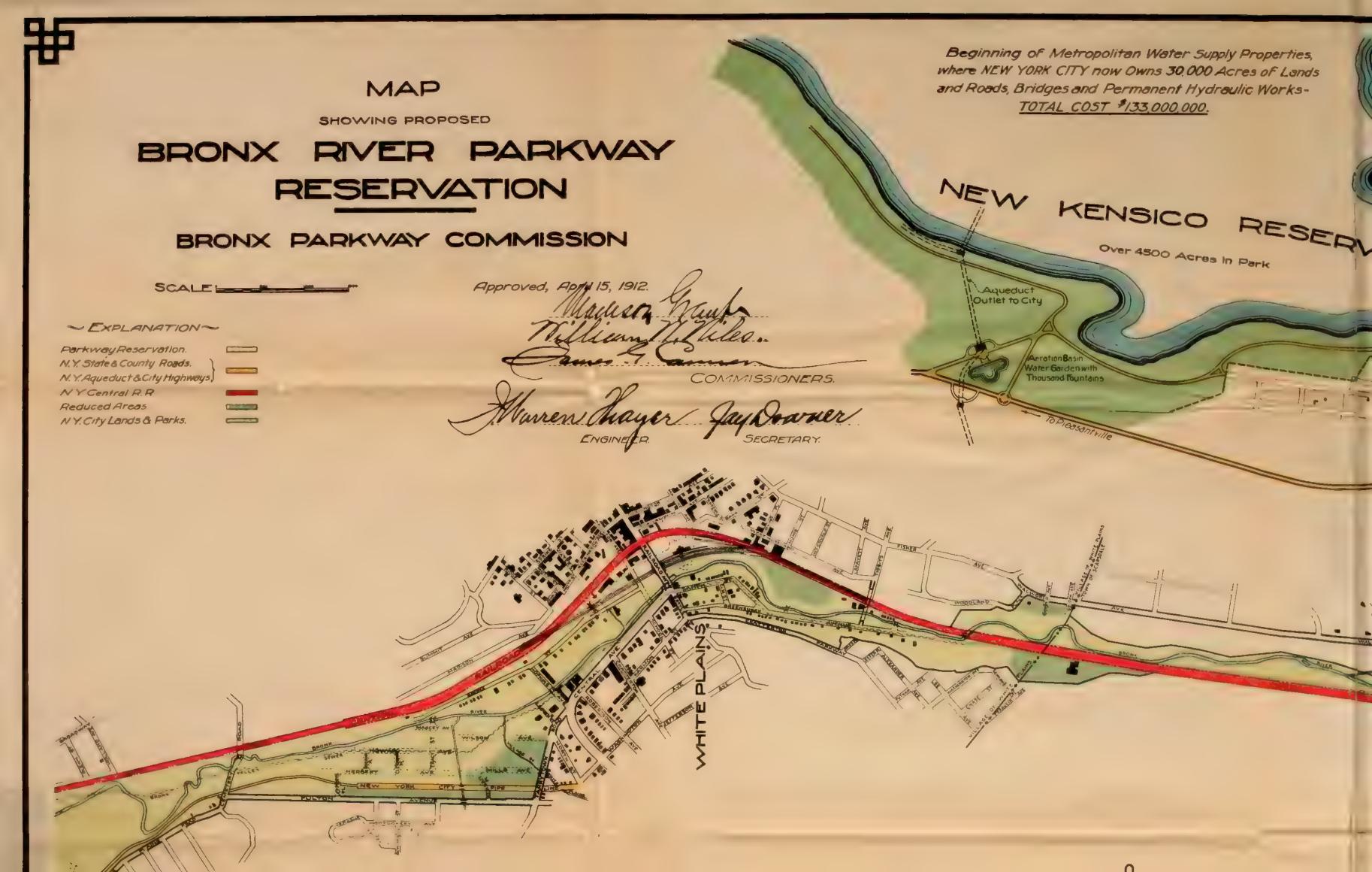
ESTHETIC POSSIBILITIES, WITH DRAINAGE.

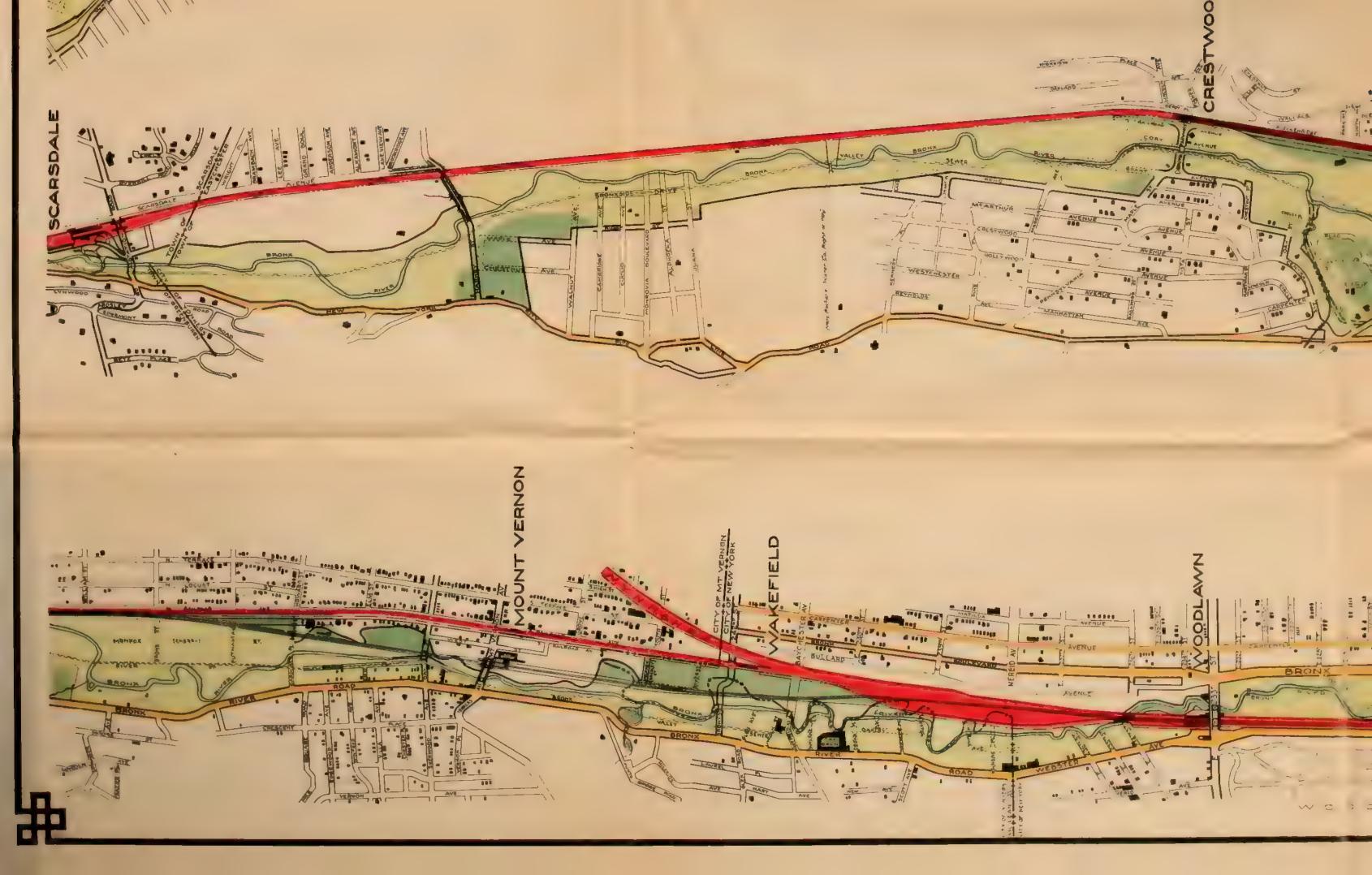






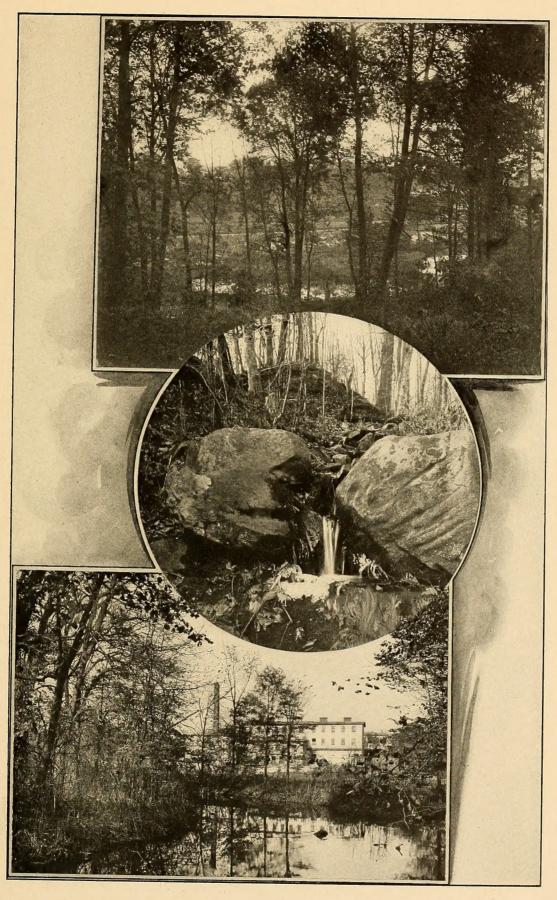




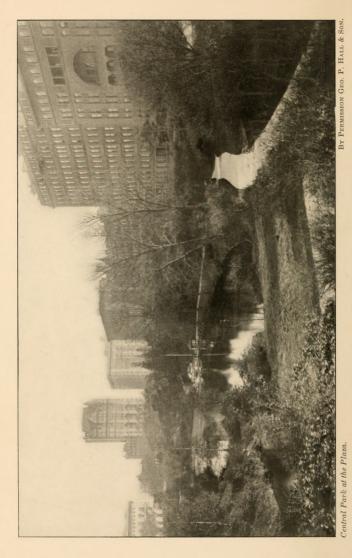








THE NATURAL BEAUTIES OF WOODLAND, MEADOW, AND ROCKY LEDGES WILL SOON DISAPPEAR.



A SIGNIFICANT EXAMPLE OF CITY IMPROVEMENT RETAINING NATURAL CONDITIONS.